discs is substantially greater than a design speed of a rotating stack of maximum allowable diameter discs while maintaining substantially similar power and operating temperature requirements as a disc drive containing a stack of maximum allowable diameter discs.

2. The disc drive assembly of claim 1, wherein the single disc drive housing is a 3½ inch standard form factor.

3. The disc drive assembly of claim 1, wherein an actuator assembly for reading data from and writing data to a selected one of the rigid recording discs comprises at least one actuator arm with a transducer, the transducer being attached to a distal end of the actuator arm, with each actuator arm operating to position each transducer adjacent a respective recording surface of a rotating rigid recording disc and further where an average seek time for a movement of the transducer by the actuator arm from a current data track of the disc to a desired destination track on the disc is substantially less for the rotating stack of smaller than the maximum allowable diameter discs that for a rotating stack of maximum allowable diameter discs.

4. The disc drive assembly of claim 1, wherein a magnetic recording disc that has a diameter that is at least 2.0% smaller than the maximum allowable diameter of 95 mm.

6. The disc drive assembly of claim 2, wherein each of the magnetic recording discs has a diameter of 84 mm.

7. The disc drive assembly of claim 1, further comprising a spindle motor.

F3

11. The disc drive assembly of claim 25, wherein the single disc drive housing has a 3½ inch low-profile standard form factor and the stack of smaller than maximum allowable diameter discs comprises six discs within the housing which is greater than a number of maximum allowable diameter discs in a 3 ½ inch low-profile standard form factor .

F4

13. The disc drive assembly of claim 1, where the recording discs are magnetic recording discs.

F5

18. The disc drive assembly of claim 3, wherein the single disc drive housing has a standard 3 ½ inch form factor.

F6

20. The disc drive assembly of claim 1, wherein the stack of discs are rotated at a design speed of 10,000 rpm.

F7

22. The disc drive assembly of claim 1 where the reduction in required torque correspondingly substantially reduces a run current required by the spindle motor to rotate a stack of smaller than maximum allowable diameter discs than is required to rotate the stack of maximum allowable diameter discs.

F8

25. The disc drive assembly of claim 1 where a number of smaller than maximum allowable diameter discs in the stack is greater than a number of maximum allowable diameter discs in the stack contained in a single disc drive housing in the standard form factor.

F9

30. A disc drive assembly comprising:
a single disc drive housing comprising a 3 ½ inch low profile standard form factor and a single spindle motor; and
a disc drive supported in the housing having:

an actuator assembly comprising at least one actuator arm with a transducer, the transducer being attached to a distal end of the actuator arm, with each actuator arm operating to position each transducer adjacent a respective surface of a rotating rigid magnetic recording disc where the average seek time for a movement of the transducer from a current data track to a desired destination track on the recording disc is less than 7.7 msec;

a stack of rigid magnetic recording discs having a smaller than maximum allowable diameter of 84 mm, as compared to a maximum allowable diameter of 95mm, a number of the stack of smaller than maximum allowable diameter discs being greater than a number of maximum diameter discs contained in the disc drive housing;

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a hub upon which the stack of smaller than maximum allowable diameter 84 mm discs is mounted, the hub being operatively configured for mounting to the spindle motor which rotates the stack of discs at a design speed of 10,000 rpm, where a torque required to rotate the stack of smaller than maximum allowable diameter of discs is less than that required to rotate a stack of maximum allowable diameter discs, and where the design speed of a rotating stack of smaller than maximum allowable diameter discs is substantially greater than a design speed of a rotating stack of maximum allowable diameter discs while maintaining substantially similar power and operating temperature requirements as a disc drive containing a stack of maximum allowable diameter discs.

33. The disc drive assembly of claim 18, wherein an average track seek time is less than 7.7 msec.

34. The disc drive assembly of claim 18, wherein the average track seek time is 5.7 msec.

35. The disc drive assembly of claim 18, wherein the average seek time is between 7.7 msec. and 5.7 msec.

Please amend the specification at page 14, line 25 through page 15, line 3, as follows:

Baffles 176 and 178 are employed about the outer periphery of the discs to channel air movement and reduce drag on the discs. An aperture 380 (FIGS. 7and 8) is provided in a wall of housing 102 to permit the clock write head to access the servo track of the disc drive, and bottom aperture 382 (FIGS. 7 and 8) provides a seat for disc spindle 106 and its associated bearings; aperture 382 being sealed by a gasket and insertion of the disc spindle to the housing.

REMARKS

Amendments for the correction of informalities have been made to claims 3 and 30. Claims 5, 12, 14, 18, 19, 21, 23-24, 26-29, 31 and 32 have been cancelled. Claims 33-35 have been added and support for these new claims can be found in the specification at page 9, lines 3-16 and page 18, lines 5-14 and as such are not believed to add new matter. The specification has been amended at page 14, line 25 and 26 in order to remove non-essential reference numbers and to bring the drawings into compliance with 37 CFR 1.84(p)(5). These amendments are believed to be proper, do not introduce new matter, and serve to place the application in condition for continued examination and allowance.